

"The first five minutes at a Fire are worth the next five hours."

AUTOMATIC SIGNAL TELEGRAPH CO.

OF THE
CITY OF BOSTON,
FOR
PROTECTION AGAINST FIRE,
BY THE
WATKINS SYSTEM.

DIRECTORS.

CHARLES E. GUILD, *President.*

WILLIAM ENDICOTT, JUN.

JOHN D. W. JOY.

WILLIAM B. WATKINS.

PATRICK T. JACKSON, *Treasurer.*

OFFICE, 178 DEVONSHIRE STREET, ROOM 20.

PERFECT PROTECTION ILLUSTRATED.

Immediately after a large fire on Broadway, the owners of the stores on the old New-York Hospital estate applied for our estimate of the cost for its protection ; which being given, we received the following reply :—

OFFICE OF THE NEW YORK REAL ESTATE ASSOCIATION.
NEW YORK, March 14, 1876.

JULIUS IVES, Jun., *Vice-President.*

DEAR SIR, — Your proposition to protect our block with the automatic system has been submitted to our trustees, and accepted. We have felt that no property could be more effectually provided than this already is, with every approved appliance for contending with fire. Yet, if the existence and location of small fires can, by your telegraph, be detected, and, in addition to your usual public announcement, the information be simultaneously given in our boiler-room (where steam is kept up, and men in attendance day and night), we should be able, without depending on human vigilance, — so often unreliable, — to use our own steam-pump and hose before the flames got beyond the control of our own men.

We are glad there are so few buildings in our vicinity not protected by your apparatus, and hope your wires may soon include every building of every block, especially in the "Dry Goods District."

Yours truly,

JARVIS SLADE, *President.*

In the above block the main line from the Receiving Station enters the building at the top, passing through each room, on the ceilings of which are placed the thermostats or heat detectors, twenty feet apart ; also at the end of each floor the transmitter or signal box for indicating the precise location of the fire when it is small and can easily be controlled.

All automatic signals go to the Patrol Station and Fire Department Headquarters, and are also sounded and registered in the boiler-room, notifying the engineer to set the pump to work while he proceeds to the room on fire to apply the hose. Messages can also be sent by hand to the engineer from each of the twenty-four tenants, — a code of signals indicating what is wanted.

The block is occupied by the following firms :—

B. H. SMITH & CO.
VAN VALKENBURG & LEAVITT.
JOHN SLADE & CO.
COLLINS, WHITIN, & CO.
W. W. HUNTINGTON & CO.
W. C. LANGLEY & CO.
E. W. HOLBROOK & CO.
SCHNABEL BROS.
WM. SIMPSON, SONS, & CO.
UPHAM, TUCKER, & CO.
ASSABET M'F'G CO.
JOSEPH WILD & CO.

FORSTMAN & CO.
E. EOLBERMANN & CO.
H. W. T. MALI & CO.
BLISS & ALLEN.
WILLISTON, KNIGHT, & CO.
SULZBACHER, G. & WEDELES.
STURSBURG & CO.
NASHEWAUNUCK M'F'G CO.
FLORENCE M'F'G CO.
ELFELT, LEVI, & CO.
STEINHART, ADLER, & CO.
NONOTUCK M'F'G CO.

"That which is destroyed by Fire is lost to the World."

PROTECTION AGAINST FIRE.

THE Automatic Signal Telegraph Company, by a system combining new principles and improvements, invented by Mr. William B. Watkins, gives instantaneous notice at the Insurance Protective Station of the existence of a fire, by the action of the fire itself, and records there the number of the building, and the room in which it occurs.

Mr. Frank L. Pope, Electrical Engineer, Expert, and Counsel for the Western Union Telegraph Company and the Gold and Stock Telegraph Company, after a careful examination of Mr. Watkins's apparatus, writes as follows, under date of Nov. 3, 1876:—

"In the organization of the Automatic Signal Telegraph System, the application of electricity to the purpose of giving instantaneous, definite, and infallible warning, not only of the occurrence, but of the precise locality of a fire, at the very moment of its origin, has apparently been brought to the utmost degree of perfection.

"The warning is *instantaneous*, for it depends on the natural law that metals must expand by heat at the moment of its application; it is *definite*, for it automatically indicates, by a predetermined signal, the very room, or portion of room, if need be, where the fire has originated; and it is *infallible*, for the reason that, owing to Mr. Watkins's beautiful arrangement of combined circuits and batteries, a signal once given by the heat-detector cannot fail to reach its destination by means of the earth-circuit, even when the telegraph line is broken or otherwise interrupted.

"Thus, within a few seconds of the origin of a fire, a knowledge not only of its occurrence, but of its precise locality, is communicated to the proper officers, enabling the necessary measures for subduing it to be taken promptly and understandingly.

"I regard this system of automatic fire-signalling, which has been carried out under the auspices of your Company to such a high degree of perfection, as being, with the single exception of the Commercial Electric Telegraph, the most scientific and practically important applica-

tion of electricity which has thus far been made in any country, and one which is undoubtedly destined to be the means of saving thousands of lives, and millions of dollars' worth of property."

The apparatus by which the above result is obtained is very simple, not liable to get out of order, and not costly.

It consists of a small copper tube, called a Thermostat, about three inches long, containing a spiral strip of metal, so arranged that the expansion due to a rise of thirty degrees above the ordinary temperature of the room in which it is placed will close the connection between the two poles of a battery, and produce an electric current, which, passing through a small iron box containing a clock-work and circuit-breaker, called a Transmitter, at once strikes a bell and starts a register at the Protective Station; each of which gives the number of the building and the room in which the fire has broken out. The Thermostat is placed at intervals of twenty-five feet throughout the building; the Transmitter, in every room that requires a separate signal.

This, with the connecting wires, is all that is necessary inside the building; the battery, recording instruments, &c., for the whole city, being placed at the Protective stations.

If the main wires be broken or disabled, accidentally or intentionally, either inside or outside of the building, notice is at once given at the Protective Station by striking a bell, which continues to ring till the trouble is removed; alarms meanwhile being carried by the *earth-circuit* without interruption, and registered at the station as accurately and promptly as if the wires were in perfect condition. This has never before been accomplished, and can only be effected by the Watkins Combined Metallic and Earth Circuit, and is considered by experts one of the most important improvements that has been made in practical telegraphy for many years.

We tax ourselves heavily for water-supply, fire-engines, watchmen, and all the other appliances for extinguishing fires *after* they have become large enough to force themselves on our notice, and to require a large quantity of water, causing great damage, to extinguish them.

No insurance will pay for loss of books, stoppage of business, and the other incidental difficulties that arise from the sudden destruction of a carefully-prepared stock, and the necessity of moving to a new stand.

By the Watkins system, a watchman is placed in every room and closet, who never leaves his post day or night, never sleeps, never drinks, and never makes a mistake at the critical moment, but is obliged by a natural law, as imperative and unerring as that which compels the living watchman to eat and sleep, to give warning of a fire

while it is still small enough to be put out with the minimum of damage and of interruption to business.

Letters given below show, that, during the three years we have been in operation in New York, all the results have been obtained that we claim our system is capable of producing.

In New York, nearly five hundred risks, amounting to over one hundred millions of dollars, are now protected by this system; and the returns of the Insurance Patrol Committee show that from May 1 1874, to Jan. 1, 1877, a period of two years and eight months, during which the Automatic Signal Telegraph has been in operation, the losses paid on buildings and contents, for fires which originated in buildings equipped with the Automatic Telegraph, all of which were detected and reported automatically, amounted to . . . \$396,908 25
The insurance on said buildings and contents amounted to 7,031,000 00
The proportion of loss to insurance being 5.64 per cent.

During the same period the losses on risks of the same class, not protected by the Automatic Telegraph, amounted to . . . \$4,530,928 23
Insurance on same amounted to 18,990,901 93
Proportion of loss to insurance being 23.86 per cent.

These figures prove that fires automatically reported were extinguished promptly before they had caused much damage, while those not so reported reached a more dangerous stage before they were controlled, — the means for extinguishing being the same in both cases; the difference being in the promptitude with which the alarm was given.

All the leading insurance companies in New York have signed an agreement to allow ten per cent reduction, on risks protected by the Watkins system, from the prices charged on similar risks not so protected; and the Boston companies will probably make a similar reduction when they have an opportunity to see the system in practical operation.

The attention of persons having extra hazardous risks is especially invited, as they can obtain even larger reductions by private bargain.

The Boston Company is now prepared to make contracts for the protection of buildings and merchandise under the Watkins patents; and, guided by the experience of New York, hopes to secure more absolute protection, and, if possible, even a more favorable result. We have already a number of buildings equipped, and several under contract.

Applications for estimates of the cost of equipment can be made at the office of the Company, No. 178 Devonshire Street, Room 20, where the whole system in miniature can be seen, and explained to all who wish to examine it.

LETTERS FROM FIRMS

WHO WERE PROTECTED BY THE AUTOMATIC TELE-
GRAPH, AND WHOSE STORES HAVE TAKEN FIRE
SINCE IT HAS BEEN IN USE IN NEW YORK.

488, 490, 492, BROADWAY, NEW YORK, March 5, 1875.

TO THE AUTOMATIC SIGNAL CO.

The great value of your invention for the protection of property from fire was signally proved to us last evening, when a fire broke out in the fifth story of our building.

Before it had obtained any considerable headway, it announced its existence—through the agency of your signals—to the Insurance Patrol, who, immediately appearing on the ground, quickly put an end to the danger.

That the inestimable value of your Automatic Signals will become universally recognized, we have no doubt.

E. H. VAN INGEN & CO.

The above refers to the fire which occurred Thursday evening, March 4, on the fifth floor of the large building on the corner of Broadway and Broome Street.

It was automatically announced by our Telegraph at the Central Station of the insurance patrol at 7.40 o'clock, and in four minutes their men were there at work with fire-extinguishers; and before \$25 damage was done the flames were readily subdued, and the patrol left the building before the fire was signalled at the police or fire department. No goods were damaged by fire or water, five or six square feet of floor being the only repairs needed.

The fire was occasioned by a hod over filled with hot coals and ashes having been left on the floor; showing that but a small fire is necessary to sound the alarm.

57 & 59 WORTH STREET, NEW YORK, April 21, 1875.

AUTOMATIC SIGNAL TELEGRAPH CO.

We are so well satisfied with the operation of your apparatus at our recent fire, that we now wish the system introduced into our adjoining building, which we are soon to occupy. We have seen the original messages as received at the Patrol Station, and are informed that their team was at our door within three minutes after the first signal was sounded from the sub-cellar. To this promptness we must accord the credit of confining the fire within so narrow limits, most of the damage being by water and smoke.

WENDELL, HUTCHINSON, & CO.

The building was owned by one of the above firm, who occupied the lofts, the following-named firm occupying the first floor and basements.

NEW YORK, April 15, 1875.

TO THE AUTOMATIC SIGNAL CO.

We were informed by the superintendent of the Insurance Patrol, and believe, that the first alarm of the fire which took place in our store, 57 & 59 Worth St., on Sunday morning, the 11th inst., was given by your signal from the sub-cellar (where it probably originated) at 7 o'clock, and from the basement at 7.05 o'clock, thereby proving the great utility of the apparatus.

WM. TURNBULL & CO.

581 BROADWAY, NEW YORK, Oct 20, 1875.

AUTOMATIC TELEGRAPH CO.

Gents, — Your Alarm Telegraph did good service in calling the fire patrol to the fire that started about ten o'clock last night in the third floor of our store.

Before the alarm could be given by the policeman, the fire had been all put out with extinguishers; and so little water used, that though our stock is very delicate, flowers, feathers, &c., hardly any thing was burned, and no damage asked of the insurance company, who, I think, should thank you, as I do very much, for having saved us all from a large loss, which would have been very inconvenient in this our busy season.

Yours respectfully,

D. KLEIN & CO.

The last mentioned was the most satisfactory of all the tests which numerous fires have given the Automatic, *the metallic circuit being broken at the time this signal was received.* It occurred on the third floor of 581 Broadway and 152 Mercer Street, about 10 o'clock Tuesday evening, Oct. 19; and, although directly opposite the headquarters of the fire department, the fire did not gain sufficient headway to attract the attention of the police or firemen, but was extinguished by the prompt action of the patrol force within ten minutes after our signal-gong sounded at their station. The lower floor was occupied by the American Clock Co.; the upper floors by D. Klein & Co., dealers in feathers and artificial flowers, whose stock was very susceptible to large damage by a small fire or by water and smoke, yet no claim was made for damage.

135 GRAND STREET, NEW YORK, Aug. 25, 1876.

GEN. ALEXANDER SHALER.

Dear Sir, — We have just had a demonstration of the efficiency and reliability of your Automatic Fire Alarm Telegraph. Yesterday afternoon a piece of canvas near our heating apparatus took fire and generated heat enough to cause an alarm to be sounded. Before any person in the building was aware of it, the Insurance Patrol from Great Jones Street, three-quarters of a mile distant, were at the door with their appliances for putting out the fire. This proves to our entire satisfaction the immense value of your telegraph system to the mercantile and manufacturing interests of New York.

Yours very respectfully,

BOYLAN & CO.

340 BROADWAY, NEW YORK, Sept. 15, 1876.

AUTOMATIC SIGNAL TELEGRAPH CO.

Gents, — We are pleased to state that we were agreeably surprised at the prompt response of the fire department the other day to the signal given by your apparatus, by the small accident in our factory, the stove-pipe being disjointed from a hot stove, giving out great heat at the ceiling.

Although the accident was not a serious one, it might have been so had it happened at night with nobody in the premises.

We remain, gents,

Yours respectfully,

N. Y. SUIT M'F'G. CO.

70 & 72 WORTH STREET, NEW YORK, March 15, 1875.

GENTLEMEN, — Early this morning, before the arrival of our porters, the heat caused by escaping steam from a fractured pipe in our sub-cellar had caused your Automatic to signal a prompt alarm which in a few minutes brought the Insurance Patrol to the point of danger, thus preventing further damage.

We afterwards visited the Patrol Station, 41 Murray Street, and found that your Telegraph had accomplished even more than had been expected of it as a fire signal only. We cheerfully give these facts in testimony of your valuable apparatus.

Yours very truly,

DALE BROTHERS & CO.

557 & 559 BROADWAY, NEW YORK, May 2, 1876.

TO THE AUTOMATIC SIGNAL TELEGRAPH CO.

Gentlemen, — That your lines in our building are kept in perfect working order was practically demonstrated a few nights since, when one of our steam-pipes exploded, filling the room with steam sufficient to operate your instrument and alarm the Insurance Patrol, who promptly responded, and shut off the steam, thus preventing what might otherwise have resulted in serious damage.

Yours truly,

MORRISON, HERRIMAN, & CO.

The last three letters show the practical service rendered by our apparatus, even without the dangerous presence of actual fire.

The following demonstrates that our wires are a protection to other buildings than those actually connected: —

On the first floor near the front door we place a Transmitter from which "hand signals" may be sent to the Patrol Station by the watchman or others who may discover or be informed of a fire near by, thus giving the location more definitely and promptly than is possible by the old system of signals from the fire-alarm telegraph in the streets, the alarm from which, in the following instance, was not received at the station until seven minutes after the Patrol had left on the receipt of our signals.

WEST BROADWAY, READE & HUDSON STS.,
NEW YORK, June 22, 1875.

AUTOMATIC TELEGRAPH CO.

Gentlemen, — The value of your system of Fire Signals was well shown in the case of a fire in Reade Street, a few doors below us, about nine o'clock last Wednesday evening. A hand alarm was given from our building, which brought the Insurance Patrol in less than four minutes, who, being directed to the fire by our porter, quickly extinguished the flames, thus preventing what we fear would have been a large fire. The fire-engine companies arrived several minutes afterwards, having been called by a policeman from a street telegraph box, but found the fire put out.

We shall be very glad to send signals for all this neighborhood if we can thus prevent a fire from spreading.

Yours truly, &c.,

H. K. THURBER & CO.

* ITTNER'S HOTEL, NEW YORK, March 20, 1875.

GENTLEMEN, — The Automatic Fire Signal Telegraph connected with this house has proved very serviceable on the only occasion it has been required; a hand-signal having been sent informing the Insurance Patrol of the fire discovered yesterday afternoon in the second floor of the opposite building, 104 Grand Street, the fire was readily extinguished, but little damage having been done by fire or water.

JOHN ITTNER.

64 to 84 WASHINGTON & 41 to 48 WEST STREET,
NEW YORK, April 10, 1877.

GEN. ALEXANDER SHALER, President.

Dear Sir, — A fire occurred in my establishment yesterday afternoon, and your Automatic Telegraph brought the Fire Department and Insurance Patrol so promptly on the ground, that with the aid of my own appliances a serious fire was prevented without sending out a general alarm. This experience satisfies me of the advantages of automatic protection. Please furnish estimate for equipping my new building outjoining, at your earliest convenience.

Yours very truly,

B. T. BABBITT.

No. 581 BROADWAY, NEW YORK, Nov. 18, 1875.

GENTLEMEN, — We have the Automatic Signal Telegraph running throughout our building, and think it a good and valuable thing. It has not been long since a fire started from one of the heaters in the upper part of the building. The telegraph gave the alarm promptly (it was late in the evening), and the fire patrol broke in, extinguishing the fire without material damage.

From our experience with it, we should consider it as very useful, desirable, and entirely reliable.

Yours very truly,

AMERICAN CLOCK CO.

80 & 82 GREENE STREET, NEW YORK, Nov. 8, 1876.

GEN. ALEXANDER SHALER, *President Automatic Signal Telegraph Co.*

Dear Sir, — We desire to express the great satisfaction felt at the operation of your Automatic Fire Alarm on Thursday evening last, which brought to our store with such wonderful celerity the apparatus of the Fire Department and the Insurance Patrol. The fire started on the fourth floor; and before any one in the neighborhood was aware of its existence, Engine 13 and the Insurance Patrol were at the door. Indeed, at that time there was so little indication of a fire, that our private watchman tried to prevent the captain of the Patrol from forcing an entrance. We feel that the case establishes the reliability of your system of fire detection; and we are only too glad to add our testimony to that of others in favor of its great value, feeling that our store was saved from what would probably have been a serious loss, except for your "Automatic."

We remain yours truly,

GARDEN & CO.

80 & 82 GREENE STREET, NEW YORK, Nov. 3, 1876.

PRESIDENT AUTOMATIC SIGNAL TELEGRAPH CO.

Dear Sir, — Our store took fire last night; and we are indebted to your system of fire protection, not only for saving our property, but being able to go on with our business this morning without interruption.

Without your Automatic we would have a ruinous loss, and you may be sure we are much gratified at the remarkable results of its operation. No consideration would induce us to be without it after so satisfactory a test of its efficiency.

Yours very respectfully,

MARKS BROS.

550 BROADWAY, NEW YORK, Oct. 16, 1876.

TO THE AUTOMATIC SIGNAL TELEGRAPH CO.

Gentlemen, — The promptness with which your Fire Telegraph called the Patrol force to our store recently demonstrated that it was in perfect working order.

MERIDEN BRITANNIA CO.

OFFICIAL INDORSEMENTS.

OFFICE OF THE MANUFACTURERS' MUTUAL INSURANCE CO.
BOSTON, March 5, 1875.

SIR, — There has been at the Riako Building in this city a practical test of the working of the Automatic Fire Signal Telegraph now being introduced in New-York City. The alarm signal is instantly transmitted by means of heat at the beginning of a fire, so as to indicate the exact building and portion on fire.

I have made a careful examination of the same, and believe that, wherever introduced, it will be equal to placing watchmen twenty-five feet apart in every room of each building for giving the alarm in case of fire; and I would recommend its introduction in all stores and mills. You may by its adoption dispense with at least one watchman where you have more than one in your factory, and the protection will be greater.

Very respectfully,
E. E. MANTON.

OFFICE OF THE BOARD OF FIRE COMMISSIONERS,
CITY HALL, BOSTON, Sept. 25, 1874.

MR. W. B. WATKINS.

Sir, — The Board of Fire Commissioners have made a careful examination of the Automatic Fire Signal Telegraph, and have no hesitation in expressing their belief that it is a practical and efficient means of protection against fire. They recommend its general introduction.

If the apparatus is placed in every room of a building, and connected with the nearest engine-house, immediate notice would be given of the precise room in which a fire might have started, before it had gained any headway.

Respectfully yours,
ALFRED P. ROCKWELL, *Chairman*.

OFFICE OF THE BOARD OF FIRE COMMISSIONERS,
CITY HALL, BOSTON, April 4, 1876.

PATRICK T. JACKSON, ESQ.

Sir, — The Board of Fire Commissioners, after a careful examination of Watkins' Automatic Signal Telegraph some year or more ago, expressed their belief in its great value as a practical and efficient means of giving the earliest intelligence of fire, and at that time recommended its general adoption.

Since then they have observed the working of it in New York, and are fully confirmed in the opinion originally expressed.

The Board suggest the advisability of placing the principal registering instruments in the Fire Department Headquarters at the City Hall, in order that the engine nearest to the room or building in which the fire has started may be instantly summoned.

Respectfully yours,
ALFRED P. ROCKWELL, *Chairman*.

Letter from the Fire Commissioners of New-York City.

HEADQUARTERS FIRE DEPARTMENT, CITY OF NEW YORK,
Feb. 10, 1876.

GEN. ALEXANDER SHALER, *President Automatic Signal Telegraph Co.*

Dear Sir, — The success which has attended the workings of your Automatic Fire Telegraph, since the day it was first introduced into the stores and warehouses of New York, is quite sufficient to commend it to every thoughtful and prudent business man; and, if our testimony as to its use will aid in your efforts to secure its general introduction, it shall be cheerfully furnished.

All our large fires, as you are aware, result from delays in notifying the Fire Department; and any means, therefore, by which early alarms can be sounded, must inevitably lead to the saving of much property. The idea of making a fire announce its own existence, by means of telegraphy which is peculiar to your system, is valuable as it is novel, and, where adopted, cannot fail to prove very beneficial.

We unhesitatingly indorse your system or plan of protection, and commend it to the property owners of New York.

Respectfully yours,

JOSEPH L. PERLEY, *President*.
 ROSWELL D. HATCH, } *Commissioners*.
 VINCENT C. KING, }

From the Superintendent of New-York-City Fire Alarm Telegraph.

HEADQUARTERS FIRE DEPARTMENT OF THE CITY OF NEW YORK,
 OFFICE OF SUPT. OF FIRE ALARM TELEGRAPH, Dec. 22, 1875.

TO THE HONORABLE BOARD OF FIRE COMMISSIONERS.

Gentlemen, — I herewith return the communication of the Automatic Signal Telegraph Company, with the following report and recommendations: —

The circuits of the Automatic Company already cover a considerable portion of the business part of the city. By means of a "thermostat," which is operated by the action of heat, an alarm is communicated from the room in which the fire occurs, direct to the quarters of the nearest Insurance Patrol, and there recorded by an automatic process.

If such an alarm could also be communicated to the nearest engine company, I have no doubt that much time would be saved.

I therefore recommend that the proposition of the Automatic Company be accepted, in order that alarms of fire received by the means proposed may be answered by a company to be designated from the Central Office by a "special call." This system might also be advantageously used in connecting large buildings with neighboring company-quarters, in sections of the city not covered by the regular circuits of the Automatic Company.

Very respectfully, your obedient servant,

J. H. EMERICK, *Superintendent Fire Alarm Telegraph*.

Their perfect satisfaction with our services to the public led to the following resolution of the Fire Commissioners, requesting that their headquarters be connected with our lines, so that our signals may there be received and thence repeated at all the engine-houses in the city:

Resolution of the New-York Board of Fire Commissioners.

HEADQUARTERS FIRE DEPARTMENT,
 CITY OF NEW YORK, Dec. 27, 1875.

GEN. ALEXANDER SHALER.

Sir, — I have the honor to transmit herewith copy of resolution adopted at a meeting of the Board of Commissioners, held on the 24th inst.

"*Resolved*, That the report and recommendations of the Superintendent of Telegraph upon the communication of the Automatic Signal Telegraph Company be approved, and that the said Company be and are hereby requested and empowered to connect with these headquarters, and also to connect isolated buildings not joined to the main lines of the company with the quarters of the companies lying nearest to such buildings, for the transmission of fire signals." . . .

Very respectfully,

CARL JUSSEN, *Acting Secretary*.

From the Chief of New-York-City Fire Department.

HEADQUARTERS FIRE DEPARTMENT,
 CITY OF NEW YORK, Jan. 21, 1876.

GEN. ALEXANDER SHALER, *President Automatic Signal Telegraph Co.*

Sir, — The undersigned very cordially indorse the Automatic Fire Signal Telegraph now being managed by you. Having, for the past two years, been brought almost daily in contact with it, and

having an intimate knowledge of the details of its workings, we have no hesitation in declaring our belief that it is unequalled for detecting and announcing fires in their beginning. Its general introduction in the buildings of this city would render a large fire quite improbable, and prove to be an incalculable benefit to the community.

Very respectfully,

ELI BATES, *Chief of Department.*

CHARLES O. SHAY, *Asst. Chief of Department.*

From the Fire Marshal of New-York-City Fire Department.

HEADQUARTERS FIRE DEPARTMENT,
CITY OF NEW YORK, OFFICE OF FIRE MARSHAL; Feb. 12, 1876.

GEN. ALEXANDER SHALER, *President Automatic Signal Telegraph Co.*

Dear Sir, — Referring to the subject of fire extinguishment in this city, there is no question about the ability of the New-York Fire Department to prevent the spread of fires to any considerable extent if early alarms are received; but until the introduction of the Automatic Signal Telegraph, this has been a want severely felt.

Your system not only detects, but also performs automatically the more important service of instantly announcing to the Fire Department the exact building and floor in which a fire has started.

To one in my position, whose duty it is to detect and punish incendiaries, it will prove of inestimable value, since no one can destroy the lines, or in any way tamper with them, without sounding an alarm at headquarters.

Your enterprise will be fully appreciated as it becomes known, and will certainly reduce, if not entirely remove, the present danger of destructive fires in this city.

Very respectfully yours,

GEORGE H. SHELDON, *Fire Marshal.*

From the Surveyor of New-York Board of Fire Underwriters.

NEW-YORK BOARD OF UNDERWRITERS,
BUREAU OF RATES AND SURVEYS; NEW YORK, Feb. 23, 1876.

GEN. ALEXANDER SHALER, *President.*

Dear Sir, — I have been familiar with the practical workings of your Automatic Fire Alarm, and during the past two years have seen many instances where it has saved much property. There is no question that this system of fire detection and alarm is destined to be generally adopted. For the protection of hotels and similar buildings I consider it especially valuable, and would suggest that each room be telegraphically connected with the hotel office, and the office with the nearest engine house and headquarters. By this means the person in charge would instantaneously be informed, day or night, of the precise location where a fire had started, and nine times out of ten be able to extinguish it without the aid of the Fire Department, and thus avoid the excitement among the inmates which must attend a general alarm.

Very respectfully yours,

ELISHA KINGSLAND,
General Surveyor, and Ex-Chief Met. Fire Dept., N.Y.

From the Superintendent of Insurance Patrol.

OFFICE OF SUPERINTENDENT OF FIRE PATROL, UNDERWRITERS' HALL,
NEW YORK, Jan. 27, 1876.

GEN. ALEXANDER SHALER, *President.*

Dear Sir, — I take pleasure in saying that I have watched the operations of your Automatic Fire Signal Telegraph for the past two years with a great deal of interest, and am glad to state that it has more than fulfilled my expectations. The promptness and correctness with which the alarms of fires have been announced by your wires has enabled our Patrol to arrest them in their incipency, thus saving much property, and preventing damage to the business where fires have started.

In my opinion its merits are in no way over-estimated, and I predict that the time is not far distant when no valuable building will be considered complete in its appointments without the Automatic.

Very respectfully,

M. B. WILSON, *Superintendent.*

I fully concur in the views herewith expressed by Superintendent Wilson concerning the Automatic Signal Telegraph.

MARTIN F. CROWELL, *Chairman Patrol Committee.*

From the Ex-Fire-Marshal, New-York City.

NEW YORK, March 12, 1876.

GEN. ALEXANDER SHALER.

Dear Sir,—A perfect system or plan of fire detection and alarm is something that New-York City has always felt the need of; and I am satisfied, from a careful inspection, that your Automatic Signal Telegraph supplies that want. It is a wonderful application of telegraphy and of the heat a fire generates, and so positive in its operations as to remove all chances of a fire getting beyond the control of a single fire extinguisher. It is plain to my mind that millions of property will be saved to New York by its general introduction.

I was greatly pleased with a novel and very valuable feature it possesses; and that is, that an incendiary cannot cut the wires or in any way tamper with them to prevent a fire alarm being given, without being detected: this feature I consider as being of the greatest importance, since it effectually puts a stop to incendiary fires. You will be overrun with business when the merits of your system become known to our merchants and business-men, for no prudent man with a large stock to carry will be without your protection.

Yours respectfully,

THOMAS McSPEDON, *Ex-Fire-Marshal.*

From the Superintendent of Buildings, N. Y. City.

DEPARTMENT OF BUILDINGS, OFFICE OF SUPERINTENDENT,
No. 2 FOURTH AVENUE, NEW YORK, Aug. 28, 1876.

GEN. ALEXANDER SHALER, *President of Automatic Signal Telegraph Co.*

Dear Sir,—I am satisfied, from a careful examination of your system of Fire Detectors, that its general introduction in buildings used and occupied as stores, warehouses, and factories, in the city, would result in a great saving of property. The importance of an early notice of fires given to the Fire Department, which your system accomplishes, cannot be over-estimated; and I shall very gladly approve of its introduction into buildings, the plans and specifications of which are submitted to this Department for my action.

Respectfully,

WALTER W. ADAMS, *Superintendent of Buildings.*

From Instructor of Corps of Sappers and Miners, N. Y. Fire Department.

NEW YORK, March 30, 1876.

GEN. ALEXANDER SHALER.

Sir,—What I have seen and learned of your Automatic Fire Signal Telegraph convinces me that it is a practical and valuable apparatus for announcing the very beginning of a fire. I would see in its general application an additional safeguard against the occurrence of conflagrations.

Very respectfully,

JULIUS H. STRIEDINGER, *Civil Engineer.*

We mention a few of the many firms now enjoying the protection of

The Automatic Signal Telegraph Company

OF THE CITY OF NEW YORK.

New York Central & H. R. R.R. Co., Freight Depot, St. John's Park.

New York Bank Clearing House Association, Nassau and Pine Streets.

New Evening Post Building, corner Broadway and Fulton Street.

Darling, Griswold & Co., Fifth Avenue Hotel.

H. B. Claflin & Co.
Low, Harriman & Co.
Collins, Downing & Co.
Richard, Iselin & Co.
Pomeroy & Plummer.
Faulkner, Page & Co.
Tiffany & Co.
Russell & Erwin Manufacturing Co.
B. L. Solomon & Sons.
A. S. Barnes & Co.
Roosevelt & Sons.
Keifer & Co.
Fitts & Austin.
Meriden Britannia Co.
Kutter, Luckemeyer & Co.
Archer & Pancoast Manufacturing Co.
Lewis Brothers & Co.
Haines, Bacon & Co.
Iverson, Blakeman, Taylor & Co.
Dunham, Buckley & Co.
The Daily Graphic Co.
Kayne, Spring, Dale & Co.
Chapman, Smith & Brittain.
Methodist Book Concern.
B. T. Babbitt.
Porter Brothers & Co.
Thomson, Langdon & Co.
James Wilde, jun., & Co.
J. B. Spelman & Sons.
Martin Bates & Co.
Frederick Victor & Achelis.
Bluxome & Co.
Rindskopf Brothers & Co.
Paine, Goodwin & Co.
E. R. Mudge, Sawyer & Co.
Calhoun, Robbins & Co.
Greiff & Co.
Ve J. Magnin, Guédon & Co.
W. H. Schieffelin & Co.
Bawo & Dotter.
Novelty Rubber Co.
Gleason Manufacturing Co.
E. C. Hazard & Co.
Knower, Thomas & Co.
C. B. & J. F. Mitchel & Co.
Samuel Raynor & Co.
Breedon & Southwick.
Noyes, White & Co.
C. F. A. Hinrichs & Co.
Dun, Barlow & Co.
Howard, Sanger & Co.
C. A. Auffmordt & Co.
Samuel McLean & Co.
Hermann Boker & Co.
Robbins & Appleton.
W. & J. Sloane.
Devlin & Co.
D. Appleton & Co.
James L. Little & Co.
E. C. Burt.
Barton, Alexander & Waller.
George A. Clark & Brothers.
A. de Greiff & Co.
William Turnbull & Co.
Wendell, Hutchinson & Co.
Henry Welsh.
Hardt & Lindgens.
George S. Moulton & Co.
George Sloane.

Arnold, Constable & Co.
Kessler & Co.
Bartlett, Reed & Co.
Hardt & Co.
John Mott & Co.
J. M. Bradstreet & Son.
Benedict, Hall & Co.
Tefft, Griswold & Co.
Carhart, Whitford & Co.
Mills & Gibb.
Bigelow Carpet Co.
Brokaw Brothers.
Glen Cove Starch Co.
Whitfield, Powers & Co.
Acker, Merrill & Condit.
H. A. Fanshawe.
Stokes, Caldwell & Co.
Johnson & Faulkner.
Morrison, Herriman & Co.
Kibbe, Chaffee, Shreve & Co.
Frank Leslie.
Garden & Co.
Leisler & Sommerhoff.
Gorham Manufacturing Co.
Klingenberg & Leonard.
Strasburger, Pfeiffer & Co.
Cheeny Brothers.
Passavant & Co.
W. C. Browning & Co.
Hammerslough Brothers.
Harris, Richmond & Shafer.
Dreyfus, Kohn & Co.
Emery, Ivey & Lee.
Slote, Woodman & Co.
Colgate & Co.
E. Packard & Co.
American Clock Co.
W. L. Strong & Co.
I. & A. Blumenthal.
Evans, Peake & Co.
Eastman, Bigelow & Dayton.
Goodrich & Lockwood.
J. S. Lowery & Co.
John M. Davies & Co.
William Knisely & Co.
Thomas Drew & Co.
Alex. King & Co.
Mortimer & Debost.
Opdyke, Terry & Steele.
Charles Scott & Co.
John Vogt & Co.
P. Van Valkenberg & Co.
Storrs Brothers.
George Pearce & Co.
William Topping & Co.
Seamless Clothing Co.
Waterbury, Smith & Co.
G. H. & E. J. Witthaus & Co.
Robert Struthers.
India Rubber Comb Co.
J. R. Whiting.
Marks Brothers.
Lord Brothers.
Victor E. Mauger.
Baldwin, Sexton & Co.
Muser Brothers.
L. Dreyfoos & Co.
Harris & Russak.
C. C. Hastings.

INTERNATIONAL EXHIBITION, PHILADELPHIA, 1876.

The United States Centennial Commission

Has examined and accepted the following Report of the Judges, and decreed
an award in conformity therewith to

WILLIAM B. WATKINS, NEW YORK,
FOR THE INSTRUMENTS OF
THE AUTOMATIC SIGNAL TELEGRAPH CO.

REPORT ON AWARDS.

The undersigned, having examined the product herein described, respectfully recommend the same to the U. S. Centennial Commission for award, for the following reasons: viz.,—

The principal object exhibited is a very complete system of Automatic Fire Alarm Telegraph.

In this a strip of two metals of different expansibilities makes a contact when heated to a certain degree.

This "thermostat" is very sure in its action; probably more so than the form in which expansion of mercury is used.

The arrangements exhibited for signalling, automatically, the precise locality of the fire (the house and the floor, or even the very room of the house), are very complete and effective, provided the line is well insulated.

A complete metallic circuit through all the buildings of a district is used to show at any moment a failure (should there be a failure of continuity or insulation at any point of the line), and at the same time to retain efficiency for alarm from any of the houses, even though there be a complete break at any point of the line.

SIR WILLIAM THOMSON, Judge,

L.L.D., D. C. L., F. R. S., Glasgow, Scotland.

APPROVAL OF GROUP JUDGES.

JOSEPH HENRY,
Secretary Smithsonian Institution, Washington.

F. A. P. BARNARD,
President of Columbia College, New York.

J. E. HILGARD,
U. S. Coast Survey, Washington.

JAMES C. WATSON,
Professor University of Michigan, Ann Arbor.

HENRY K. OLIVER,
Salem, Mass.

GEO. F. BRISTOW,
New York.

EDW. FAVRE PARRET,
Switzerland.

JUL. SCHIEDMAYER,
Germany.

P. F. KUPKA,
Austria.

E. LEVASSEUR,
France.

[A true Copy of the Record.]

FRANCIS A. WALKER,

Chief of the Bureau of Awards.

Given by authority of the U. S. Centennial Commission.

A. T. GOSHORN, Director-General.

J. L. CAMPBELL, Secretary.

J. R. HAWLEY, President.